# Air Pollution Control Title V Permit to Operate Statement of Basis for Permit No. R10T5-ID-00-02

## Northwest Pipeline Corporation Fort Hall Reservation Pocatello, Idaho

**Date: October 17, 2002** 

#### 1. EPA Authority to Issue Part 71 Permits

On July 1, 1996 (61 FR 34202), EPA adopted regulations codified at 40 CFR part 71 setting forth the procedures and terms under which the Agency would administer a federal operating permits program. These regulations were updated on February 19, 1999 (64 FR 8247) to incorporate EPA's approach for issuing federal operating permits to covered stationary sources in Indian country.

As described in 40 CFR 71.4(a), EPA will implement a part 71 program in areas where a state, local, or Tribal agency has not developed an approved part 70 program. Unlike states, Indian Tribes are not required to develop operating permits programs, though EPA encourages Tribes to do so. See, for example, Indian Tribes: Air Quality Planning and Management (63 FR 7253, February 12, 1998) (also known as the "Tribal Authority Rule"). Therefore, within Indian country, EPA will administer and enforce a part 71 federal operating permits program for stationary sources until Tribes receive approval to administer their own operating permits programs.

#### 2. The Shoshone-Bannock Tribes

- a. Indian Country: The Pocatello compressor station is located within the exterior boundaries of the Fort Hall Reservation and is in Indian Country, as defined in 40 CFR part 71.
- b. Reservation: The Fort Hall Indian Reservation was established by the Bridger Treaty of 1868, and set apart lands in SE Idaho as a 1,350 square mile reservation for the Shoshone and Bannock Tribes. The current size is 849.8 square miles (543,900 acres) Today there are 5 districts located within the boundaries of the Reservation. Based on the 2000 Census data, the total enrolled Tribal population of the Reservation is approximately 3,006. The total Reservation Population, of all races, which includes portions of the counties of Bannock, Bingham, Caribou, and Power, is 5,762.
- c. Tribal Government: The Shoshone-Bannock operates under a constitution that was approved in .
- d. Local Air Quality and Attainment Status:

#### 3. Facility Information

a. Location: The Pocatello natural gas compressor facility is a privately owned facility which is located at 2605 Gas Plant Road in Power County, Idaho and is doing business within the boundaries of the Fort Hall Reservation and is in Indian Country, as defined by 40 CFR Part 71. The mailing address is:

Williams Gas Pipelines-West 295 Chipeta Way P.O. Box 58900 Salt Lake City, Utah 84158-0900

b. Facility Contact/Responsible Official

The facility contact and responsible official is H. Lee Bauerle, Environmental Specialist.

a. General Description of Operations and Products

Northwest Pipeline Corporation (Northwest ) is a privately owned company (i.e. not owned by the Shoshone-Bannock Tribe). The site is a natural gas compressor station.

d. Emission Units and Emission Generating Activities

Northwest provided in their application the information contained in Table 1. Table 1 lists emission units, a description of emission generating activities, and information regarding any control devices. Except as noted below, Northwest was unable to identify the date of installation of most equipment. The date of installation and any modification to the equipment can be important for determining the applicability of some federal standards (see further discussion in Section 4 - Applicable Requirements).

Part 71.5 (c)(11)(ii)(A) and (B) allow sources to separately list in the permit application such units or activities that qualify as "insignificant" based on potential emissions below two tons/year for all regulated pollutants that are not listed as hazardous air pollutants ("HAP") under Section 112(b) and below 1000 lbs/year or the de minimus level established under Section 112(g), whichever is lower, for HAPs. However, the application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to calculate the permit fee. Units that qualify as "insignificant" for the purpose of the Part 71 permit application are in no way exempt from applicable requirements or any requirements of the Part 71 permit.

# Table 1 Emission Units and Control Devices

# Northwest

Emissions Unit and Unit ID #	Description	Control Device
Unit 1, TLA-6	<ul> <li>Clark Turbine (14.8 MMBtu/hr)</li> <li>Serial # 73546</li> <li>installed 1956</li> </ul>	None
Unit 2, TLA-6	<ul> <li>Clark Turbine (14.8 MMBtu/hr)</li> <li>Serial # 73547</li> <li>installed 1956</li> </ul>	None
Unit 3, TLA-6	<ul> <li>Clark Turbine (14.8 MMBtu/hr)</li> <li>Serial # 73548</li> <li>installed 1956</li> </ul>	None
Unit 4. TCV-10	<ul> <li>Clark Turbine (21.7 MMBtu/hr)</li> <li>Serial # 107027</li> <li>installed 1956</li> </ul>	None

Unit 5, Generator	<ul> <li>Caterpillar 3408 standby generator</li> <li>Serial # CA 00844</li> <li>installed 1998</li> <li>400 hp</li> </ul>	None
Unit 6, Boiler	<ul> <li>Sellers C80W Boiler</li> <li>Serial # 99401</li> <li>(3.515 MMBtu/hr)</li> <li>1315 hp</li> </ul>	None
Unpaved Roads Source 7	•	None
Paved Roads Source 8	Less dust is caused by vehicle use on paved roads	None

#### e. Potential to Emit

Table 2 includes potential to emit (PTE) data provided by Northwest and, in some cases revised by EPA, as discussed below. PTE means the maximum capacity of Northwest to emit any air pollutant (criteria or HAPs) under its physical and operational design. Any physical or operational limitation on the maximum capacity of Northwest to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, may be treated as part of its design <u>if</u> the limitation is enforceable by EPA. PTE is meant to be a worst case emissions calculation and is used in many, though not all, cases to determine the applicability of federal requirements.

Each emission estimate in Table 2 relies upon the use of an "emission factor". Emission factors are numbers derived from testing of emissions from one or more facilities. The emissions measured by the tests are correlated to some production rate or some other easily measured quantity. An emission factor is thereby developed which can be used to estimate emissions by simply multiplying the emission factor by the production rate or other specified known quantity. Emission factors are obtained from industry, state, and federal studies and are meant to be industry averages. Emission factors can also be derived from a source specific emissions test as was done for particulate matter from the boilers at this facility. In any event, although widely used, emission factors can only *estimate* emissions. For applicability and compliance purposes, it is the responsibility of the source to accurately characterize and estimate their own emissions and appropriately use emission factors. Inaccurate characterization and estimation of the source's emissions could result in an enforcement action.

Soot, dust, and other air pollution in the form of particles are measured two ways: as particulate matter of 10 microns or less (PM10) and as total particulate (PM). PM10 is a subset of PM. In other words, PM emissions will always be the same as or larger than PM10 emissions. Similarly, pollutants that are categorized as hazardous air pollutants (HAP) are almost always in the form of particulates (e.g., PM10 or PM) or volatile organic compounds (VOC), as well. Therefore, in evaluating the data in Table 2, it is important to be aware that some of the air pollutants are double counted.

Table 2

Actual Emissions in Tons per Year for Fee Calculation

#### Northwest

Emission Unit			A	ir Pollut	ants		
and Unit ID	N0x - oxide PM - particu CO - carbon	late matter	PM10 - particulate matter with a diameter 10 microns or les			or less	
	NOx	VOC	S02	EPA S02	PM10	СО	HAPs

Unit 1 TLA-6	211.30	6.30	0.32	0.179	0.43	15.03	0.056842
Unit 2 TLA-6	190.27	5.68	0.29	0.161	0.38	13.54	0.049052
Unit 3 TLA-6	198.99	5.94	0.30	0.168	0.40	14.16	0.050816
Unit 4 TVC-10	392.10	5.47	0.51	0.282	0.67	80.55	0.085556
Unit 5 Generator	0.01	1.81E-4	3.6E-6	2.1E-5	1.19E-4	0.02	1.98E-4
Unit 6 Boiler	0.44	2.40E-2	2.6E-3	1.6E-1	3.31E-2	0.37	8.21E-3
Unit 7 Unpaved Roads*					(7)*		

Unit 8 Paved Roads*					(7)*		
TOTALS	993.11	123.67	1.42	1.740	23.41	1.92	0.25

st The emissions from this unit are considered "fugitive," as defined in 40 CFR Part 71 .

Table 3

Prevention of Significant Deterioration
Significant Emission Rate Increases for Existing Major sources

Pollutant	Emission Rate in Tons per Year
Particulate Matter (PM)	25
Fine Particulate (PM10)	15
Sulfur Dioxide (SO <sub>2</sub> )	40
Nitrogen Oxide (NOx)	40
Volatile Organic Compounds (VOC)	40
Carbon Monoxide (CO)	100
Lead	0.6
Fluorides	3
Sulfuric Acid Mist	7
Hydrogen Sulfide (H <sub>2</sub> S)	10
Total Reduced Sulfur Compounds (TRS) - including H <sub>2</sub> S	10
Municipal Waste Combustor (MWC) acid gases	40

MWC metals	15
MWC organics	3.5 X 10 <sup>-6</sup>
Municipal Solid Waste Landfills - Non-Methane Organic Compounds	50
Chlorofluorocarbons (CFCs) and Halons	any emission rate

As discussed in section 3(f), except for the restarting of the facility in 1986, based on information provided by the source, EPA has not drawn any conclusions regarding compliance with past PSD permitting requirements at this facility and no enforcement shield is implied or granted.

#### j. Other Requirements

Based on the information provided in Northwest's application, EPA has no evidence that this source is subject to any existing applicable federal CAA programs except those discussed above. Federal CAA programs include Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and the acid rain program under Title IV of the CAA. Further, Northwest is not subject to any state implementation plan (SIP) requirements which are applicable within state jurisdictions. Therefore, based on information provided by the source in the application, except for the generally applicable requirements of the chemical accident prevention program, the stratospheric ozone protection program, and the demolition and renovation requirements, Northwest is not subject to any other substantive requirements that control their emissions under the CAA.

EPA recognizes that, in some cases, sources of air pollution located in Indian country are subject to fewer requirements than similar sources located on land under the jurisdiction of a state or local air pollution control agency. To address this regulatory gap, EPA is in the process of developing national regulatory programs for preconstruction review of major sources in nonattainment areas and of minor sources in both attainment and nonattainment areas. These programs will establish, where appropriate, control requirements for sources that would be incorporated into part 71 permits. To establish additional applicable, federally-enforceable emission limits, EPA Region 10, in consultation with Tribes and other stakeholders, has drafted a Federal Implementation Plan (FIP) that will establish federal requirements for sources in Indian Country within Region 10. The Region hopes to propose this FIP within the year. EPA will establish priorities for its direct federal implementation activities by addressing as its highest priority the most serious threats to public health and the environment in Indian country that are not otherwise being adequately addressed. Further, EPA encourages and will work closely with all tribes wishing to develop Tribal Implementation Plans (TIPs) for approval under the Tribal Authority Rule. EPA intends that its federal regulations created through a FIP will apply only in those situations in which a tribe does not have an approved TIP.

#### 5. Use of All Credible Evidence

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source and EPA in such determinations.

#### 6. Annual Emission Inventory and Fee Submittal

Northwest is required to provide an annual emissions inventory of their actual emissions for the preceding calendar year and to pay fees based on that inventory. EPA has included in Tables 4 and 5 below the equations and emission factors, modified by EPA as discussed in section 3.e, that Northwest used to calculate their emissions and to pay their initial fees. These equations and emission factors are based on information provided by Northwest in their application. Northwest has an ongoing obligation to assure that all data in their application is correct and to notify EPA of any errors or omissions (See permit term IX.A.(b)). Also, Northwest is required to certify to the accuracy and completeness of all data submitted to EPA, including the accuracy of its annual emission inventory. If at any time EPA becomes aware of a more accurate way to characterize the emissions from Pocatello compressor station, through information provided by the source or by any other means, these equations and/or emission factors will be revised. It is EPA's expectation that Northwest will use these equations and emission factors to calculate their annual emissions and to pay fees unless Northwest can justify, in writing, why a different equation or emission factor or other estimation methodology more accurately represents their emissions for the year.

All of the calculations in Tables 4 and 5 rely upon emission factors. Please see the discussion of the uses and limitations of emission factors above under 3(f). Table 6 describes the source of each emission factor used in Tables 4 and 5.

#### Table 4

# **Calculating Actual Annual Emissions for Fee Purposes for Point Sources**

Emissions Units 01 through 08

Calculate actual annual emissions, for fee purposes, for emission units 01 through 08 using the following equation and data specified in Table 4 below:

E = EF x P x K

Where

E = pollutant emissions in tons/year;

P = recorded rates for the process parameters or actual annual throughput for process parameter identified in Table 5;

EF = emission factor from Table 5; and,

K = 1 ton/2000 lbs for conversion of actual annual emissions from pounds per year to tons per year.

Emissions Unit and Unit ID #	Pollutant	Emission Factor (EF)	Emission Factor (Units)	Actual Process Parameters (P)	Process Parameters (units)
Unit 1-3, TLA-6	NOx		lb NOx/MMcf	cubic feet of natural gas	3(135MMcf)/yr
	СО		lb CO/MMcf	cubic feet of natural gas	3(135MMcf)/yr
	SO2		lb SO2/MMcf	cubic feet of natural gas	3(135MMcf)/yr
	VOC		lb VOC/MMcf	cubic feet of natural gas	3(135MMcf)/yr

	PM10	lb PM10/MMcf	cubic feet of natural gas	3(135MMcf)/yr
	HAPs	lb HAPs/MMcf	cubic feet pf natural gas	3(135MMcf)/yr
Unit 4, TVC-10	NOx	lb NOx/MMcf	cubic feet of natural gas	177MMcf/yr
	СО	lb CO/MMcf	cubic feet of natural gas	177MMcf/yr
	SO2	lb SO2/MMcf	cubic feet of natural gas	177MMcf/yr
	VOC	lb VOC/MMcf	cubic feet of natural gas	177MMcf/yr
	PM10	lb PM10/MMcf	cubic feet of natural gas	177MMcf/yr
	HAPs	lb HAPs/MMcf	cubic feet of natural gas	177MMcf/yr
Unit 5, Generator	NOx	lb NOx/cf	cubic feet of natural gas	13022cf/yr

	СО	lb CO/cf	cubic feet of natural gas	13022cf/yr
	SO2	lb SO2/cf	cubic feet of natural gas	13022cf/yr
	VOC	lb VOC/cf	cubic feet of natural gas	13022cf/yr
	PM10	lb PM10/cf	cubic feet of natural gas	13022cf/yr
	HAPs	lb HAPs/cf	cubic feet of natural gas	13022cf/yr
Unit 6,	NOx	lb NOx/MMcf	cubic feet of natural gas	9.5MMcf/yr
Boiler				
	СО	lb CO/MMcf	cubic feet of natural gas	9.5MMcf/yr
	SO2	lb SO2/MMcf	cubic feet of natural gas	9.5MMcf/yr
	VOC	lb VOC/MMcf	cubic feet of natural gas	9.5MMcf/yr

	PM10	lb PM10/MMCF	cubic feet of natural gas	9.5MMcf/yr
	HAPs	lb HAPs/MMcf	cubic feet of natural gas	9.5MMcf/yr
Unit 7, Paved Roads	PM10	lb PM10/ton	maintenance visits	tons/yr
Unit 8, Unpaved Roads	PM10	lb PM10/ton	maintenance visits	tons/yr

#### Table 5

# **Calculating Actual Annual Emissions** for Fee Purposes for Fugitive Sources

For Emissions Units 7 and 8 (Roads)

For emission units 7 and 8 (roads), use the following equation, Table 6 below and the potential to emit data available in Table 2:

 $E = PTE \times \underline{APP}$ MPP

Where:

E = pollutant emissions in tons/year;

PTE = potential to emit from Table 3 in the statement of basis;

APP = actual process parameter identified in Table B; and,

MPP = maximum process parameter identified in Table B.

Emission Unit and Unit ID #	Pollutant	Maximum Process Parameter (MPP)	Maximum Process Parameter (Units)	Actual Process Parameter (APP)	Actual Process Parameter (Units)
Unit 7, Paved Roads	PM10				

Unit 8, Unpaved Roads	PM10		
1			

Table 6 **EMISSION FACTORS USED IN TABLES 3 AND 4** 

Emissions Unit and Unit ID #	Source of the Emission Factor
Units 1-3	04/2000 EPA Compilation of Air Pollutant Emission Factors, "AP-42" Table 3.1-3
Unit 4	04/2000 EPA Compilation of Air Pollutant Emission Factors, "AP-42" Table 3.1-3
Unit 5	07/2000 EPA Compilation of Air Pollutant Emission Factors, "AP-42" Table 3.2-3
Unit 6	07/2000 EPA Compilation of Air Pollutant Emission Factors, "AP-42" Section 1.4

## Northwest Pipeline Corporation Pocatello Compressor Station

Draft Title V Permit to Operate No. R10T5-ID-01-01 Response to Comments October 17, 2002

#### A. Provisions of the Draft Permit Changed in the Final Permit and Reason for the Change

In the final permit and statement of basis, at the request of Northwest Pipeline after the close of the public comment period, EPA changed the name and telephone number for the person identified as the company contact from Pauline Mendes to H. Lee Bauerle. Had the permit already been issued, this is a change that would have been made by administrative amendment pursuant to 40 CFR 71.26(c).

#### B. Response to Comments Raised During the Public Comment Period

EPA received public comments from the the Shoshone-Bannock Tribes (the Tribe) which is an "affected State" as defined in 40 CFR part 71<sup>1</sup>. EPA must notify any affected State in writing of any refusal by EPA to accept all recommendations for the proposed permit that the affected State submitted during the public or affected State review period. The notice shall include the EPA's reasons for not accepting any such recommendation. The EPA is not required to accept recommendations that are not based on applicable requirements or the requirements of part 71. This response to comments constitutes EPA's notification to the affected State of any refusal by EPA to accept all recommendations.

The complete text of all comments is available in the docket at EPA Region 10. Following is a summary of each comment submitted followed by EPA's response:

<u>Comment 1</u>. The Tribe had no specific comments at this time but advised EPA that startup/shutdown or upset events typically emit the largest quantities of pollutants at this facility. The Tribe suggested that EPA might impose more rigorous reporting requirements and provided examples of appropriate monitoring.

<u>EPA's Response</u>: At this time, the source is subject to no applicable requirements, other than the general requirements under the chemical accident prevention program, the stratospheric ozone depletion program, and the asbestos abatement program and, so, no monitoring related to startup, shutdown, or upset is included in the permit. After promulgation of the proposed Federal Implementation Plan (FIP) or at any time the source becomes subject to other applicable requirements, EPA will reopen the permit to include the new provisions and will consider incorporating the Tribe's suggestions at that time.

Comment 2. The Tribe asked that the Title V permit include a section referencing the Tribal Air

<sup>&</sup>lt;sup>1</sup>In a June 21, 2000 letter, EPA determined the Tribe meets the requirements of CAA section 301(d) and 40 CFR 49.6 based on the Tribe's application which was submitted on October 20, 1999.

Quality Standards ordinance and the requirement for the facility to stay in compliance with these standards.

<u>EPA's Response</u>: Because the Tribe has not submitted their ordinance to EPA for approval as a Tribal Implementation Plan, these rules are not federally enforceable and do not meet the definition of "applicable requirement" established in 40 CFR part 71. EPA, therefore, has no authority to incorporate these requirements into the Title V permit directly or by reference. However, this ordinance is discussed in Section 3.f of the statement of basis which accompanies the permit. Nothing in the Title V permit changes or conflicts with the Tribe's own authority to promulgate and enforce its own rules.

<u>Comment 3</u>. The Tribe asked EPA to include requirements to document gas throughput and the number of hours each compressor is used vs. the total gas output.

<u>EPA's Response</u>: Because the source is subject to no applicable requirements related to gas throughput or hours of operation, EPA has no authority, within the Title V permit, to require this monitoring. EPA will consider incorporating these requirements when the source becomes subject to federally enforceable requirements such as those contained in the proposed FIP.

<u>Comment 4</u>. The Tribe recommended co-inspections combining both EPA and Tribal inspectors for future site visits.

<u>EPA's Response</u>: For sources located within the exterior boundaries of the Reservation, it is EPA's policy to always coordinate with the Tribe prior to a site visit and to invite Tribal inspectors to participate in inspections.